

W.B.  
A.V.

1. A plastics-covered metal plate for car body characterized by being made by covering one surface or both surfaces of the metal plate with at least two kinds of plastics layers whose rate of elongation is different each other.
2. A plastics-covered metal plate for car body set forth in Claim 1 which is covered with a double-layered plastics layer made by laminating a plastics layer (A) with relatively smaller rate of elongation at the upper layer side farther from the metal plate and a plastics layer (B) with larger rate of elongation at the lower layer side nearer to the metal plate.
3. A plastics-covered metal plate for car body set forth in Claim 2 wherein the rate of elongation of the plastics layer (B) is larger than the rate of elongation of the plastics layer (A) by at least 10%.
4. A plastics-covered metal plate for car body set forth in Claim 2 wherein the rate of elongation of the plastics layer (B) is larger than the rate of elongation of the plastic layer (A) by at least 50-200%.
5. A plastics-covered metal plate for car body set forth in Claim 2 wherein the rate of elongation of the plastics layer (A) is 1-100%.
6. A plastics-covered metal plate for car body set forth in Claim 2 wherein the rate of elongation of the plastics layer (A) is 5-70%.
7. A plastics-covered metal plate for car body set forth in Claim 2 wherein the oxygen permeability of the plastics layer (A) in its single coating film form at 25°C is less than  $10^{-11}$  cm<sup>3</sup>.cm/cm<sup>2</sup>.sec.cmHg.
8. A plastics-covered metal plate for car body set forth in Claim 2 wherein the oxygen permeability of the plastics layer (A) in

its single coating film form at 25°C is less than  $10^{-12} \text{ cm}^3 \cdot \text{cm/cm}^2 \cdot \text{sec.cmHg}$

9. A plastics-covered metal plate for car body set forth in Claim 2 wherein a plastics layer (A) is further laminated at the lower layer of the plastics layer (B) (at the nearer side to the metal plate).

10. A plastics-covered metal plate for car body set forth in Claim 1 wherein the plastics layer is formed of a thermoplastic resin selected from the group consisting of polyolefin resin, polyester resin, polycarbonate resin, epoxy resin, vinyl acetate resin, vinyl chloride resin, fluorine-containing resin, polyvinyl acetal resin, polyvinyl alcohol resin, polyamide resin, polystyrene resin, acrylic resin, polyurethane resin, phenolic resin, polyether resin and cellulose type resin.

11. A plastics-covered metal plate for car body set forth in Claim 1 wherein the thickness of each layer of the plastics layer is in the range of 1-100  $\mu\text{m}$ .

12. A plastics-covered metal plate for car body set forth in Claim 1 wherein the thickness of each layer of the plastics layer is in the range of 5-50  $\mu\text{m}$ .

13. A plastics-covered metal plate for car body set forth in Claim 1 wherein the total thickness of the plastics layer is in the range of 5-120  $\mu\text{m}$ .

14. A plastics-covered metal plate for car body set forth in Claim 1 wherein an adhesive exists between a plastics layer and the metal plate and between each other plastics layer.

15. A process of covering a car body characterized by forming a shell body of a car body using partly or totally the plastics-covered metal plate set forth in Claim 1 and then by electrodeposition coating the portion of the shell body where metal is exposed.

16. A process of covering a car body set forth in Claim 15 wherein the main body and outer cover parts of the car body are

SUB  
 AI  
 CONT  
 03779546 020904  
 T00020 9456255

prepared by cutting, shaping and combining the plastics-covered metal plate set forth in Claim 1 and then a shell body is formed by assembling them.

17. A process of covering a car body set forth in Claim 15 wherein the outer cover parts of the car body are prepared by cutting, shaping and combining the plastics-covered metal plate set forth in Claim 1 and then a shell body is formed by assembling them with a main body.

18. A covering process set forth in Claim 15 wherein electro-deposition coating is conducted by using a cationic electrodeposition paint.

19. A car body made by using partly or totally the plastics-covered metal plate set forth in Claim 1.

443  
A2